

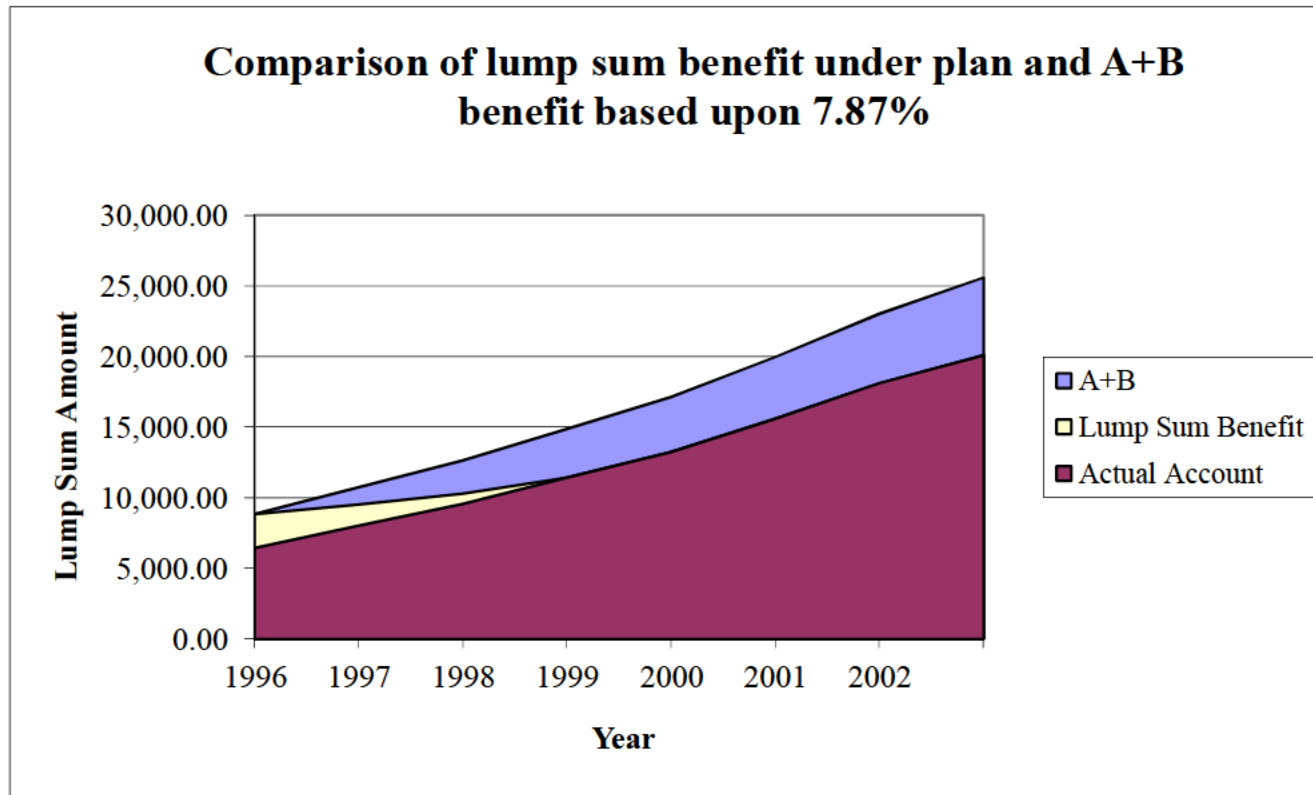
EXHIBIT 78

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Pay Credit	"B" account	A+B	Actual Account	Lump Sum Benefit	Excess over prior benefit
0.00	0.00	8,813.78	6,411.67	8,813.78	0.00
1,211.12	1,211.12	10,729.26	8,007.49	9,518.14	0.00
1,077.89	2,361.68	12,641.72	9,565.83	10,280.05	0.00
1,262.06	3,765.44	14,869.97	11,401.84	11,401.84	297.31
1,122.15	5,113.51	17,110.65	13,208.10	13,208.10	1,210.96
1,579.24	6,999.56	19,963.53	15,579.83	15,579.83	2,615.86
1,584.43	9,003.97	23,015.69	18,099.05	18,099.05	4,087.33
1,180.26	10,724.47	25,582.55	20,093.77	20,093.77	5,235.69

Compensation	Service	Pay Credit Rate	Pay Credit	age	Lump sum
47,704.00	12.00	2.00%	1,211.12	41.75	14,914.37
50,089.20	13.00	2.00%	1,282.68	42.75	15,836.00
52,593.66	14.00	2.00%	1,357.81	43.75	16,816.64
55,223.34	15.00	2.00%	1,436.70	44.75	17,860.57
57,984.51	16.00	2.70%	2,051.37	45.75	18,972.44
60,883.74	17.00	2.70%	2,168.79	46.75	20,157.39
63,927.92	18.00	2.70%	2,292.08	47.75	21,420.94
67,124.32	19.00	2.70%	2,421.53	48.75	22,769.03
70,480.53	20.00	2.70%	2,557.46	49.75	27,221.87
74,004.56	21.00	3.70%	3,700.25	50.75	31,412.65
77,704.79	22.00	3.70%	3,905.62	51.75	36,997.66
81,590.03	23.00	3.70%	4,121.25	52.75	43,123.14
85,669.53	24.00	3.70%	4,347.66	53.75	49,831.77
89,953.01	25.00	3.70%	4,585.39	54.75	57,169.34

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart



Name	Osberg	
Date of Birth	3/25/1963	
Date of Hire	11/15/1982	
Date of Entry	12/1/1983	
Historic Information		
Year	Age at Beginning of	W-2 Earnings
1982	27.75	\$1.00
1983	28.75	\$0.00
1984	29.75	\$0.00
1985	30.75	\$22,280.33
1986	31.75	\$25,905.83
1987	32.75	\$36,694.28
1988	33.75	\$35,348.00
1989	34.75	\$37,680.00
1990	35.75	\$40,971.00
1991	36.75	\$41,653.00
1992	37.75	\$42,710.00
1993	38.75	\$45,320.00
1994	39.75	\$46,778.00
1995	40.75	\$48,880.00
1996	41.75	\$47,704.00
1997	42.75	\$43,263.00
1998	43.75	\$49,401.95
1999	44.75	\$44,738.38
2000	45.75	\$46,326.82
2001	46.75	\$46,455.10
2002	47.75	\$34,642.28
2003	48.75	\$0.00
2004	49.75	\$0.00
2005	50.75	\$0.00
2006	51.75	\$0.00
2007	52.75	\$0.00
2008	53.75	\$0.00
2009	54.75	\$0.00
2010	55.75	\$0.00
2011	56.75	\$0.00
2012	57.75	\$0.00
2013	58.75	\$0.00
2014	59.75	\$0.00
2015	60.75	\$0.00
2016	61.75	\$0.00
2017	62.75	\$0.00
2018	63.75	\$0.00
2019	64.75	\$0.00
January 1988 earnings		\$3,898.17

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Calculations under Proir Plan							
1988 Average		\$22,459.20					
Average in excess of							
\$10,800.00		\$11,659.20					
Years of Credited Service as of							
1-Jan-88		5.08					
Catchup Benefit		\$1,437.07					
Year	Years of Credited Service at Beginning of	Earnings	Earnings in excess of \$10,800	Accrual for Year under Formula	Accrued Benefit at end of year without	Accrued Benefit at end of year under Prior Formula	Determined By Plan
1982	0.00	\$1.00	\$0.00	\$0.00	\$0.00		
1983	0.00	\$0.00	\$0.00	\$0.00	\$0.00		
1984	0.08	\$0.00	\$0.00	\$0.00	\$0.00		
1985	1.08	\$22,280.33	\$11,480.33	\$280.20	\$280.20		
1986	2.08	\$25,905.83	\$15,105.83	\$334.59	\$614.79		
1987	3.08	\$36,694.28	\$25,894.28	\$496.41	\$1,111.20		
1988	4.08	\$35,348.00	\$24,548.00	\$476.22	\$1,587.42	\$1,913.29	
1989	5.08	\$37,680.00	\$26,880.00	\$511.20	\$2,098.62	\$2,424.49	
1990	6.08	\$40,971.00	\$30,171.00	\$560.57	\$2,659.19	\$2,985.06	
1991	7.08	\$41,653.00	\$30,853.00	\$570.80	\$3,229.99	\$3,555.86	
1992	8.08	\$42,710.00	\$31,910.00	\$586.65	\$3,816.64	\$4,142.51	
1993	9.08	\$45,320.00	\$34,520.00	\$625.80	\$4,442.44	\$4,768.31	
1994	10.08	\$46,778.00	\$35,978.00	\$647.67	\$5,090.11	\$5,415.98	
1995	11.08	\$48,880.00	\$38,080.00	\$679.20	\$5,769.31	\$6,095.18	6,098.57
1996	12.08	\$47,704.00	\$36,904.00	\$661.56	\$6,430.87	\$6,760.13	
1997	13.08	\$43,263.00	\$32,463.00	\$594.95	\$7,025.82	\$7,355.08	
1998	14.08	\$49,401.95	\$38,601.95	\$687.03	\$7,712.85	\$8,042.11	
1999	15.08	\$44,738.38	\$33,938.38	\$617.08	\$8,329.93	\$8,659.19	
2000	16.08	\$46,326.82	\$35,526.82	\$640.90	\$8,970.83	\$9,300.09	
2001	17.08	\$46,455.10	\$35,655.10	\$642.83	\$9,613.66	\$9,942.92	
2002	18.08	\$34,642.28	\$23,842.28	\$465.63	\$10,079.29	\$10,408.55	
2003	19.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2004	20.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2005	21.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2006	22.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2007	23.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2008	24.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2009	25.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2010	26.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2011	27.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2012	28.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2013	29.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2014	30.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2015	31.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2016	32.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2017	33.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2018	34.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	
2019	35.08	\$0.00	\$0.00	\$0.00	\$10,079.29	\$10,408.55	

Initial Account Balance				
			Determined by Plan	
December 31, 1995 Accrued Benefit		\$6,098.57	\$6,098.57	
Age on January 1, 1996		41.75	41.75	
65Px		0.905997783		
Years to age 65		23.25		
1/1.09^(65-x)		0.13484		
Years of Vesting Service		9.08		
APR		8.59952		
PVFx		1.05133	1.05134	
Eligible for Enhancement		No	No	
Enhancement Factor		1.00000	1.00000	
Initial Account Balance		\$6,411.61	\$6,411.67	

Cash Balance Accrued Benefit on January 1, 1996				
Initial Account Balance		\$6,411.67		
Years to age 65		23.25		
1.06^n		3.87580		
Projected Account		\$24,850.35		
1996 Conversion APR		10.59693982		
Cash Balance Accrued Benefit		\$2,345.05		
Wearaway Percentage		38.45%		
Six effects impacting magnitude of wear-away				
9% Discount				
Date of Birth		3/25/1946		
65th Birthday		3/25/2019		
Years after				
1-Jan-96		23.25		
1.06/1.09^n		0.52263		
Mortality Discount				
Age		41.75		
L41		984673.8399		
L42		983646.8251		
L41.75		983903.5788		
L65		891414.2794		
Factor		0.90600		
Conversion discount				
Factor		0.81151		
Enhancement				
Factor		1.00000		

Early Retirement Subsidy Elimination			
Factor		1.00000	
Lump Sum Subsidy factor (on January 1, 1996)			
Years to 65		23.25	
417(e) rate		6.06%	
417(e) interest discount		0.25464	
417(e) mortality discount		0.90600	
417(e) factor		0.23070	
6% interest only factor		0.25801	
Factor		1.11837	
Wear-away Percentage on lump sum on January 1, 1996			
Product		42.97%	
Product w/o Lump Sum Subsidy		38.43%	
Lump Sum on January 1, 1996			
Cash Balance Accrued Benefit		\$2,345.05	
Prior Accrued Benefit		\$6,098.57	
Total Accrued Benefit		\$6,098.57	
Age on January 1, 1996		41.75	
1996 417(e) PVF _x		2.44555	
417(e) minimum lump sum		\$14,914.36	
Account Balance		\$6,411.67	
Lump sum benefit		\$14,914.36	
Wearaway Percentage		42.99%	
Lump Sum shortfall		\$8,502.69	

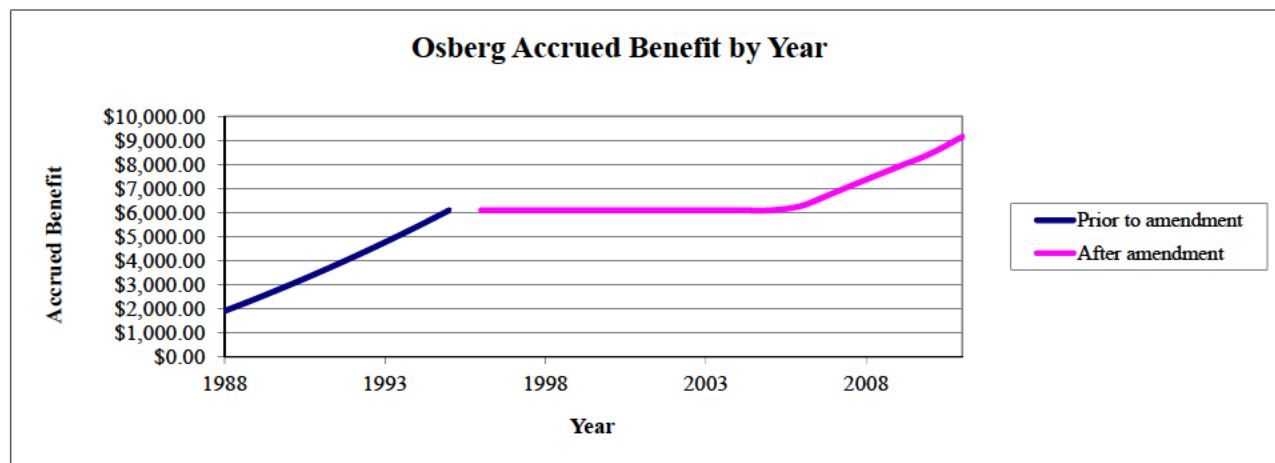
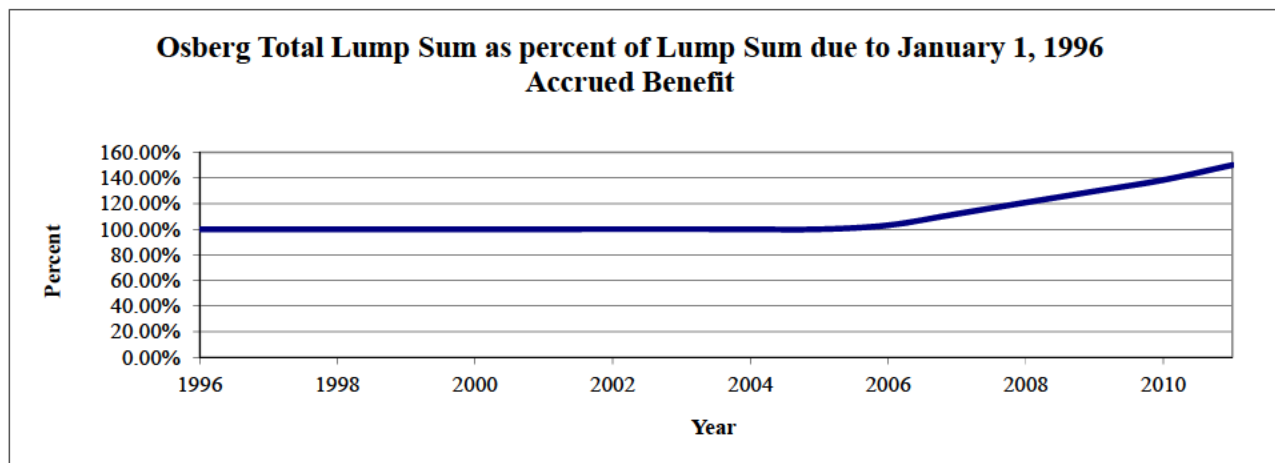
Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

1996 Account Growth								
					Determined by Plan			
Years of Credited Service as of January 1, 1996				12.08				
Percentage of W-2 Compensation				2.00%				
Percentage of Compensation in excess of \$22,000				1.00%				
1996 W-2 Compensation				\$47,704.00				
Compensation in excess of \$22,000				\$25,704.00				
Pay Credit				\$1,211.12	\$1,211.12			
Notional account as of January 1				\$6,411.67	\$6,411.67			
Interest Credit (6% of January 1 balance)				\$384.70	\$384.70			
Notional account as of December 31				\$8,007.49	\$8,007.49			
Account Balance by year								
Year	Years of Credited Service at Beginning of Plan Year	W-2 Earnings	Notional Account at Beginning of Plan Year	Interest Credit	Pay Credit	Account Balance at End of Year	Account Determined by Plan	
1996	12.08	\$47,704.00	\$6,411.67	\$384.70	\$1,211.12	\$8,007.49	\$8,007.49	
1997	13.08	\$43,263.00	\$8,007.49	\$480.45	\$1,077.89	\$9,565.83	\$9,565.83	
1998	14.08	\$49,401.95	\$9,565.83	\$573.95	\$1,262.06	\$11,401.84	\$11,401.84	
1999	15.08	\$44,738.38	\$11,401.84	\$684.11	\$1,122.15	\$13,208.10	\$13,208.11	
2000	16.08	\$46,326.82	\$13,208.10	\$792.49	\$1,579.24	\$15,579.83	\$15,579.84	
2001	17.08	\$46,455.10	\$15,579.83	\$934.79	\$1,584.43	\$18,099.05	\$18,099.06	
2002	18.08	\$34,642.28	\$18,099.05	\$814.46	\$1,180.26	\$20,093.77	\$20,293.78	note prorated to 10/1/2002
2003	19.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2004	20.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2005	21.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2006	22.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2007	23.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2008	24.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2009	25.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2010	26.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2011	27.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2012	28.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2013	29.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2014	30.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2015	31.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2016	32.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2017	33.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2018	34.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
2019	35.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Accrued Benefit by Year						
Year	Account Balance at Beginning of Plan Year	Age at Beginning of Plan Year	Account Projected to age 65	Conversion APR at 65	Cash Balance Accrued Benefit	Total Accrued Benefit
1996	\$6,411.67	41.75	\$24,850.35	10.59694	\$2,345.05	\$6,098.57
1997	\$8,007.49	42.75	\$29,278.71	10.20826	\$2,868.14	\$6,098.57
1998	\$9,565.83	43.75	\$32,996.84	10.64635	\$3,099.36	\$6,098.57
1999	\$11,401.84	44.75	\$37,103.83	10.64635	\$3,485.12	\$6,098.57
2000	\$13,208.10	45.75	\$40,548.82	10.36378	\$3,912.55	\$6,098.57
2001	\$15,579.83	46.75	\$45,122.67	10.64635	\$4,238.32	\$6,098.57
2002	\$18,099.05	47.75	\$49,451.78	10.64635	\$4,644.95	\$6,098.57
2003	\$0.00	48.75	\$0.00	10.86573	\$0.00	\$6,098.57
2004	\$0.00	49.75	\$0.00	10.86573	\$0.00	\$6,098.57
2005	\$0.00	50.75	\$0.00	10.86573	\$0.00	\$6,098.57
2006	\$0.00	51.75	\$0.00	10.86573	\$0.00	\$6,098.57
2007	\$0.00	52.75	\$0.00	10.86573	\$0.00	\$6,098.57
2008	\$0.00	53.75	\$0.00	10.86573	\$0.00	\$6,098.57
2009	\$0.00	54.75	\$0.00	10.86573	\$0.00	\$6,098.57
2010	\$0.00	55.75	\$0.00	10.86573	\$0.00	\$6,098.57
2011	\$0.00	56.75	\$0.00	10.86573	\$0.00	\$6,098.57
2012	\$0.00	57.75	\$0.00	10.86573	\$0.00	\$6,098.57
2013	\$0.00	58.75	\$0.00	10.86573	\$0.00	\$6,098.57
2014	\$0.00	59.75	\$0.00	10.86573	\$0.00	\$6,098.57
2015	\$0.00	60.75	\$0.00	10.86573	\$0.00	\$6,098.57
2016	\$0.00	61.75	\$0.00	10.86573	\$0.00	\$6,098.57
2017	\$0.00	62.75	\$0.00	10.86573	\$0.00	\$6,098.57
2018	\$0.00	63.75	\$0.00	10.86573	\$0.00	\$6,098.57
2019	\$0.00	64.75	\$0.00	10.86573	\$0.00	\$6,098.57

Immediate Annuity Benefit by year							
Year	Years of Vesting Service at Beginning of Plan Year	Age at Beginning of Plan Year	Account Balance at Beginning of Plan Year	Cash Balance Annuity	Prior Plan Reduction Factor	Prior Plan Immediate Annuity	Immediate Annuity
1996	12.08	41.75	\$6,411.67	\$431.30	0.10589	\$645.75	\$645.75
1997	13.08	42.75	\$8,007.49	\$574.18	0.11508	\$701.82	\$701.82
1998	14.08	43.75	\$9,565.83	\$649.27	0.12516	\$763.31	\$763.31
1999	15.08	44.75	\$11,401.84	\$780.65	0.13624	\$830.85	\$830.85
2000	16.08	45.75	\$13,208.10	\$948.97	0.14842	\$905.12	\$948.97
2001	17.08	46.75	\$15,579.83	\$1,086.90	0.16182	\$986.87	\$1,086.90
2002	18.08	47.75	\$18,099.05	\$1,275.44	0.17661	\$1,077.04	\$1,275.44
2003	19.08	48.75	\$0.00	\$0.00	0.19294	\$0.00	\$0.00
2004	20.08	49.75	\$0.00	\$0.00	0.21100	\$0.00	\$0.00
2005	21.08	50.75	\$0.00	\$0.00	0.23100	\$0.00	\$0.00
2006	22.08	51.75	\$0.00	\$0.00	0.25322	\$0.00	\$0.00
2007	23.08	52.75	\$0.00	\$0.00	0.27792	\$0.00	\$0.00
2008	24.08	53.75	\$0.00	\$0.00	0.30544	\$0.00	\$0.00
2009	25.08	54.75	\$0.00	\$0.00	0.33617	\$0.00	\$0.00
2010	26.08	55.75	\$0.00	\$0.00	0.96917	\$0.00	\$0.00
2011	27.08	56.75	\$0.00	\$0.00	0.97250	\$0.00	\$0.00
2012	28.08	57.75	\$0.00	\$0.00	0.97583	\$0.00	\$0.00
2013	29.08	58.75	\$0.00	\$0.00	0.97917	\$0.00	\$0.00
2014	30.08	59.75	\$0.00	\$0.00	0.98250	\$0.00	\$0.00
2015	31.08	60.75	\$0.00	\$0.00	0.98583	\$0.00	\$0.00
2016	32.08	61.75	\$0.00	\$0.00	0.98917	\$0.00	\$0.00
2017	33.08	62.75	\$0.00	\$0.00	0.99250	\$0.00	\$0.00
2018	34.08	63.75	\$0.00	\$0.00	0.99583	\$0.00	\$0.00
2019	35.08	64.75	\$0.00	\$0.00	0.99917	\$0.00	\$0.00



Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Account Balance by year if did not terminate and received 5% salary increases						
Year	Years of Credited Service at Beginning of Plan Year	W-2 Earnings	Notional Account at Beginning of Plan Year	Interest Credit	Pay Credit	Account Balance at End of Year
1996	12.08	\$47,704.00	\$6,411.67	\$384.70	\$1,211.12	\$8,007.49
1997	13.08	\$43,263.00	\$8,007.49	\$480.45	\$1,077.89	\$9,565.83
1998	14.08	\$49,401.95	\$9,565.83	\$573.95	\$1,262.06	\$11,401.84
1999	15.08	\$44,738.38	\$11,401.84	\$684.11	\$1,122.15	\$13,208.10
2000	16.08	\$46,326.82	\$13,208.10	\$792.49	\$1,579.24	\$15,579.83
2001	17.08	\$46,455.10	\$15,579.83	\$934.79	\$1,584.43	\$18,099.05
2002	18.08	\$48,777.86	\$18,099.05	\$1,085.94	\$1,678.50	\$20,863.49
2003	19.08	\$51,216.75	\$20,863.49	\$1,251.81	\$1,777.28	\$23,892.58
2004	20.08	\$53,777.59	\$23,892.58	\$1,433.55	\$1,880.99	\$27,207.12
2005	21.08	\$56,466.46	\$27,207.12	\$1,632.43	\$2,726.89	\$31,566.44
2006	22.08	\$59,289.79	\$31,566.44	\$1,893.99	\$2,883.58	\$36,344.01
2007	23.08	\$62,254.28	\$36,344.01	\$2,180.64	\$3,048.11	\$41,572.76
2008	24.08	\$65,366.99	\$41,572.76	\$2,494.37	\$3,220.87	\$47,288.00
2009	25.08	\$68,635.34	\$47,288.00	\$2,837.28	\$3,402.26	\$53,527.54
2010	26.08	\$72,067.11	\$53,527.54	\$3,211.65	\$4,757.93	\$61,497.12
2011	27.08	\$75,670.46	\$61,497.12	\$3,689.83	\$5,022.78	\$70,209.73
2012	28.08	\$79,453.99	\$70,209.73	\$4,212.58	\$5,300.87	\$79,723.18
2013	29.08	\$83,426.69	\$79,723.18	\$4,783.39	\$5,592.86	\$90,099.43
2014	30.08	\$87,598.02	\$90,099.43	\$5,405.97	\$5,899.45	\$101,404.85
2015	31.08	\$91,977.92	\$101,404.85	\$6,084.29	\$8,379.81	\$115,868.95
2016	32.08	\$96,576.82	\$115,868.95	\$6,952.14	\$8,835.10	\$131,656.19
2017	33.08	\$101,405.66	\$131,656.19	\$7,899.37	\$9,313.16	\$148,868.72
2018	34.08	\$106,475.94	\$148,868.72	\$8,932.12	\$9,815.12	\$167,615.96
2019	35.08	\$111,799.74	\$167,615.96	\$10,056.96	\$10,342.17	\$188,015.09

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Accrued Benefit by year if did not terminate and received 5% salary increases						
Year	Account Balance at Beginning of Plan Year	Age at Beginning of Plan Year	Account Projected to age 65	Conversion APR at 65	Cash Balance Accrued Benefit	Total Accrued Benefit
1996	\$6,411.67	41.75	\$24,850.35	10.59694	\$2,345.05	\$6,098.57
1997	\$8,007.49	42.75	\$29,278.71	10.20826	\$2,868.14	\$6,098.57
1998	\$9,565.83	43.75	\$32,996.84	10.64635	\$3,099.36	\$6,098.57
1999	\$11,401.84	44.75	\$37,103.83	10.64635	\$3,485.12	\$6,098.57
2000	\$13,208.10	45.75	\$40,548.82	10.36378	\$3,912.55	\$6,098.57
2001	\$15,579.83	46.75	\$45,122.67	10.64635	\$4,238.32	\$6,098.57
2002	\$18,099.05	47.75	\$49,451.78	10.64635	\$4,644.95	\$6,098.57
2003	\$20,863.49	48.75	\$53,778.32	10.86573	\$4,949.35	\$6,098.57
2004	\$23,892.58	49.75	\$58,100.18	10.86573	\$5,347.10	\$6,098.57
2005	\$27,207.12	50.75	\$62,415.31	10.86573	\$5,744.23	\$6,098.57
2006	\$31,566.44	51.75	\$68,316.93	10.86573	\$6,287.37	\$6,287.37
2007	\$36,344.01	52.75	\$74,204.41	10.86573	\$6,829.21	\$6,829.21
2008	\$41,572.76	53.75	\$80,075.53	10.86573	\$7,369.55	\$7,369.55
2009	\$47,288.00	54.75	\$85,928.27	10.86573	\$7,908.19	\$7,908.19
2010	\$53,527.54	55.75	\$91,760.66	10.86573	\$8,444.96	\$8,444.96
2011	\$61,497.12	56.75	\$99,455.35	10.86573	\$9,153.12	\$9,153.12
2012	\$70,209.73	57.75	\$107,118.58	10.86573	\$9,858.39	\$9,858.39
2013	\$79,723.18	58.75	\$114,748.30	10.86573	\$10,560.57	\$10,560.57
2014	\$90,099.43	59.75	\$122,342.64	10.86573	\$11,259.49	\$11,259.49
2015	\$90,099.43	60.75	\$115,417.58	10.86573	\$10,622.16	\$10,622.16
2016	\$101,404.85	61.75	\$122,547.03	10.86573	\$11,278.30	\$11,278.30
2017	\$115,868.95	62.75	\$132,100.75	10.86573	\$12,157.56	\$12,157.56
2018	\$131,656.19	63.75	\$141,603.38	10.86573	\$13,032.11	\$13,032.11
2019	\$148,868.72	64.75	\$151,053.20	10.86573	\$13,901.80	\$13,901.80

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Immediate Annuity Benefit by year if not terminated with 5% salary increase							
Year	Years of Vesting Service at Beginning of Plan Year	Age at Beginning of Plan Year	Account Balance at Beginning of Plan Year	Cash Balance Annuity	Prior Plan Reduction Factor	Prior Plan Immediate Annuity	Immediate Annuity
1996	12.08	41.75	\$6,411.67	\$431.30	0.10589	\$645.75	\$645.75
1997	13.08	42.75	\$8,007.49	\$574.18	0.11508	\$701.82	\$701.82
1998	14.08	43.75	\$9,565.83	\$649.27	0.12516	\$763.31	\$763.31
1999	15.08	44.75	\$11,401.84	\$780.65	0.13624	\$830.85	\$830.85
2000	16.08	45.75	\$13,208.10	\$948.97	0.14842	\$905.12	\$948.97
2001	17.08	46.75	\$15,579.83	\$1,086.90	0.16182	\$986.87	\$1,086.90
2002	18.08	47.75	\$18,099.05	\$1,275.44	0.17661	\$1,077.04	\$1,275.44
2003	19.08	48.75	\$20,863.49	\$1,454.42	0.19294	\$1,176.64	\$1,454.42
2004	20.08	49.75	\$23,892.58	\$1,683.07	0.21100	\$1,286.77	\$1,683.07
2005	21.08	50.75	\$27,207.12	\$1,937.87	0.23100	\$1,408.78	\$1,937.87
2006	22.08	51.75	\$31,566.44	\$2,274.83	0.25322	\$1,544.25	\$2,274.83
2007	23.08	52.75	\$36,344.01	\$2,651.74	0.27792	\$1,694.88	\$2,651.74
2008	24.08	53.75	\$41,572.76	\$3,073.14	0.30544	\$1,862.73	\$3,073.14
2009	25.08	54.75	\$47,288.00	\$3,544.18	0.33617	\$2,050.16	\$3,544.18
2010	26.08	55.75	\$53,527.54	\$4,070.75	0.36917	\$2,291.53	\$4,070.75
2011	27.08	56.75	\$61,497.12	\$4,749.32	0.39250	\$2,530.86	\$4,749.32
2012	28.08	57.75	\$70,209.73	\$5,510.65	0.40583	\$2,811.19	\$5,510.65
2013	29.08	58.75	\$79,723.18	\$6,364.50	0.40917	\$3,131.52	\$6,364.50
2014	30.08	59.75	\$90,099.43	\$7,321.91	0.40250	\$3,511.85	\$7,321.91
2015	31.08	60.75	\$101,404.85	\$8,395.63	0.38583	\$3,952.17	\$8,395.63
2016	32.08	61.75	\$113,868.95	\$9,782.04	0.35917	\$4,452.50	\$9,782.04
2017	33.08	62.75	\$131,656.19	\$11,343.15	0.29250	\$6,052.83	\$11,343.15
2018	34.08	63.75	\$148,868.72	\$13,100.81	0.19583	\$6,073.16	\$13,100.81
2019	35.08	64.75	\$167,615.96	\$15,078.39	0.09917	\$6,093.49	\$15,078.39

Deutsch 6/7/12 Rebuttal Report - Section IV.A Chart

Lump Sum Benefit by year if not terminated with 5% salary increase								
Year	Years of Service at Beginning of Plan Year	Age at Beginning of Plan Year	Accrued Benefit At Beginning of Year	Cash Balance Account at Beginning of Year	Present Value Factor	Prior Plan Lump Sum	Total Lump Sum	Percent
1996	12.08	41.75	6,098.57	6,411.67	2.45	14,914.37	14,914.37	100.00%
1997	13.08	42.75	6,098.57	8,007.49	2.26	13,768.89	13,768.89	100.00%
1998	14.08	43.75	6,098.57	9,565.83	2.81	17,146.95	17,146.95	100.00%
1999	15.08	44.75	6,098.57	11,401.84	3.84	23,432.46	23,432.46	100.00%
2000	16.08	45.75	6,098.57	13,208.10	2.89	17,605.42	17,605.42	100.00%
2001	17.08	46.75	6,098.57	15,579.83	3.81	23,260.15	23,260.15	100.00%
2002	18.08	47.75	6,098.57	18,099.05	4.04	24,645.30	24,645.30	100.00%
2003	19.08	48.75	6,098.57	20,863.49	5.05	30,793.70	30,793.70	100.00%
2004	20.08	49.75	6,098.57	23,892.58	5.13	31,266.45	31,266.45	100.00%
2005	21.08	50.75	6,098.57	27,207.12	5.65	34,470.86	34,470.86	100.00%
2006	22.08	51.75	6,287.37	31,566.44	6.21	37,870.01	39,042.39	103.10%
2007	23.08	52.75	6,829.21	36,344.01	6.47	39,478.65	44,208.39	111.98%
2008	24.08	53.75	7,369.55	41,572.76	6.79	41,430.08	50,064.36	120.84%
2009	25.08	54.75	7,908.19	47,288.00	7.13	43,490.16	56,394.93	129.67%
2010	26.08	55.75	8,444.96	53,527.54	7.49	45,667.72	63,238.12	138.47%
2011	27.08	56.75	9,153.12	61,497.12	7.87	47,973.53	72,001.71	150.09%
2012	28.08	57.75	9,858.39	70,209.73	8.27	50,420.44	81,505.06	161.65%
2013	29.08	58.75	10,560.57	79,723.18	8.69	53,022.45	91,816.16	173.16%
2014	30.08	59.75	11,259.49	90,099.43	9.15	55,793.62	103,009.02	184.63%
2015	31.08	60.75	10,622.16	101,404.85	9.63	58,750.79	102,328.95	174.17%
2016	32.08	61.75	11,278.30	115,868.95	10.15	61,915.64	115,868.95	187.14%
2017	33.08	62.75	12,157.56	131,656.19	10.71	65,311.08	131,656.19	201.58%
2018	34.08	63.75	13,032.11	148,868.72	11.31	68,967.04	148,868.72	215.85%
2019	35.08	64.75	13,901.80	167,615.96	11.96	72,914.01	167,615.96	229.88%

Pay credit rates		
Years of		
Credited		
Service	Percentage	
at the	of W-2	
beginning	Percentage	Compensation
of the	of W-2	in Excess of
plan year	Compensation	\$22,000
0	1.10%	0.55%
1	1.10%	0.55%
2	1.10%	0.55%
3	1.10%	0.55%
4	1.10%	0.55%
5	1.10%	0.55%
6	1.50%	0.75%
7	1.50%	0.75%
8	1.50%	0.75%
9	1.50%	0.75%
10	1.50%	0.75%
11	2.00%	1.00%
12	2.00%	1.00%
13	2.00%	1.00%
14	2.00%	1.00%
15	2.00%	1.00%
16	2.70%	1.35%
17	2.70%	1.35%
18	2.70%	1.35%
19	2.70%	1.35%
20	2.70%	1.35%
21	3.70%	1.85%
22	3.70%	1.85%
23	3.70%	1.85%
24	3.70%	1.85%
25	3.70%	1.85%
26	4.90%	2.45%
27	4.90%	2.45%
28	4.90%	2.45%
29	4.90%	2.45%
30	4.90%	2.45%
31	6.60%	3.30%
32	6.60%	3.30%
33	6.60%	3.30%
34	6.60%	3.30%
35	6.60%	3.30%
36	8.90%	4.45%
37	8.90%	4.45%
38	8.90%	4.45%
39	8.90%	4.45%
40	8.90%	4.45%

Present Value Factors at 9% for Initial Account Balance					
Age	83GAMU	Lx	65Px	Years to 65	PVFX
1	0.000257	1,000,000.00	0.891414	64	0.03085
2	0.000257	999,743.00	0.891643	63	0.03364
3	0.000257	999,486.07	0.891873	62	0.03667
4	0.000257	999,229.20	0.892102	61	0.03998
5	0.000257	998,972.40	0.892331	60	0.04359
6	0.000229	998,715.66	0.892561	59	0.04753
7	0.000210	998,486.95	0.892765	58	0.05182
8	0.000199	998,277.27	0.892953	57	0.05649
9	0.000195	998,078.61	0.89313	56	0.06159
10	0.000195	997,883.99	0.893305	55	0.06715
11	0.000201	997,689.40	0.893479	54	0.07320
12	0.000209	997,488.87	0.893658	53	0.07981
13	0.000216	997,280.39	0.893845	52	0.08701
14	0.000224	997,064.98	0.894038	51	0.09486
15	0.000233	996,841.64	0.894239	50	0.10342
16	0.000241	996,609.37	0.894447	49	0.11275
17	0.000251	996,369.19	0.894663	48	0.12293
18	0.000261	996,119.10	0.894887	47	0.13403
19	0.000272	995,859.11	0.895121	46	0.14613
20	0.000283	995,588.24	0.895364	45	0.15932
21	0.000297	995,306.49	0.895618	44	0.17371
22	0.000310	995,010.88	0.895884	43	0.18940
23	0.000325	994,702.43	0.896162	42	0.20651
24	0.000341	994,379.15	0.896453	41	0.22517
25	0.000359	994,040.07	0.896759	40	0.24552
26	0.000378	993,683.21	0.897081	39	0.26771
27	0.000398	993,307.59	0.89742	38	0.29192
28	0.000422	992,912.26	0.897777	37	0.31832
29	0.000446	992,493.25	0.898157	36	0.34711
30	0.000475	992,050.60	0.898557	35	0.37852
31	0.000505	991,579.37	0.898984	34	0.41279
32	0.000538	991,078.63	0.899439	33	0.45016
33	0.000574	990,545.43	0.899923	32	0.49094
34	0.000614	989,976.85	0.90044	31	0.53544
35	0.000668	989,369.01	0.900993	30	0.58398
36	0.000705	988,708.11	0.901595	29	0.63697
37	0.000751	988,011.07	0.902231	28	0.69478
38	0.000806	987,269.07	0.902909	27	0.75788
39	0.000873	986,473.33	0.903637	26	0.82676
40	0.000952	985,612.14	0.904427	25	0.90196
41	0.001043	984,673.84	0.905289	24	0.98407
42	0.001151	983,646.83	0.906234	23	1.07376
43	0.001278	982,514.65	0.907278	22	1.17174
44	0.001426	981,258.99	0.908439	21	1.27883
45	0.001597	979,859.72	0.909737	20	1.39592
46	0.001794	978,294.88	0.911192	19	1.52399
47	0.002014	976,539.82	0.912829	18	1.66413
48	0.002252	974,573.07	0.914672	17	1.81756
49	0.002509	972,378.33	0.916736	16	1.98561
50	0.002778	969,938.63	0.919042	15	2.16976
51	0.003059	967,244.15	0.921602	14	2.37163
52	0.003352	964,285.35	0.92443	13	2.59301
53	0.003659	961,053.06	0.927539	12	2.83589
54	0.003988	957,536.57	0.930945	11	3.10247
55	0.004336	953,717.91	0.934673	10	3.39523
56	0.004711	949,582.59	0.938743	9	3.71692

57	0.005121	945,109.11	0.943187	8	4.07062
58	0.005581	940,269.20	0.948042	7	4.45981
59	0.006103	935,021.56	0.953362	6	4.88847
60	0.006700	929,315.12	0.959216	5	5.36116
61	0.007383	923,088.71	0.965686	4	5.88308
62	0.008172	916,273.55	0.972869	3	6.46025
63	0.009080	908,785.76	0.980885	2	7.09969
64	0.010127	900,533.99	0.989873	1	7.80957
65	0.011328	891,414.28	1	0	8.59952
66	0.012698	881,316.34			
67	0.014242	870,125.38			
68	0.015966	857,733.06			
69	0.017869	844,038.49			
70	0.019958	828,956.37			
71	0.022241	812,412.06			
72	0.024765	794,343.20			
73	0.027581	774,671.29			
74	0.030740	753,305.08			
75	0.034295	730,148.48			
76	0.038286	705,108.04			
77	0.042715	678,112.28			
78	0.047569	649,146.71			
79	0.052837	618,267.45			
80	0.058508	585,600.05			
81	0.064570	551,337.76			
82	0.071006	515,737.88			
83	0.077798	479,117.40			
84	0.084927	441,843.03			
85	0.092377	404,318.62			
86	0.100370	366,968.88			
87	0.108870	330,136.21			
88	0.118004	294,194.28			
89	0.128107	259,478.18			
90	0.139029	226,237.21			
91	0.150645	194,783.68			
92	0.163045	165,440.49			
93	0.176292	138,466.25			
94	0.191504	114,055.75			
95	0.208253	92,213.62			
96	0.225097	73,009.86			
97	0.242999	56,575.56			
98	0.262351	42,827.75			
99	0.283670	31,591.85			
100	0.307186	22,630.19			
101	0.333156	15,678.51			
102	0.361975	10,455.12			
103	0.394472	6,670.63			
104	0.432808	4,039.25			
105	0.478674	2,291.03			
106	0.533916	1,194.37			
107	0.600414	556.68			
108	0.680076	222.44			
109	0.774845	71.16			
110	0.999999	16.02			
111	0.999999	0.00			
112	0.999999	0.00			
113	0.999999	0.00			
114	0.999999	0.00			
115	0.999999	0.00			
116	0.999999	0.00			
117	0.999999	0.00			
118	0.999999	0.00			
119	0.999999	0.00			
120	0.999999	0.00			

Year	30 Year	Rate for Conv	Mortality
1996	6.06%	6.06%	83GAMU
1997	6.55%	6.55%	83GAMU
1998	5.99%	6.00%	83GAMU
1999	5.06%	6.00%	83GAMU
2000	6.35%	6.35%	83GAMU
2001	5.49%	6.00%	83GAMU
2002	5.48%	6.00%	83GAMU
2003	4.92%	6.00%	94GAR
2004	5.07%	6.00%	94GAR
2005	4.86%	6.00%	94GAR
2006	4.65%	6.00%	94GAR
2007	4.68%	6.00%	94GAR
2008	4.53%	6.00%	RP2000
2009	2.87%	6.00%	RP2000
2010	4.49%	6.00%	RP2000
2011	4.42%	6.00%	RP2000

Age	94GAR	Lx	65Px
1	0.000514	1,000,000.00	0.90377
2	0.000341	999,486.00	0.90424
3	0.00027	999,145.18	0.90454
4	0.000207	998,875.41	0.90479
5	0.000188	998,668.64	0.90498
6	0.000179	998,480.89	0.90515
7	0.00017	998,302.16	0.90531
8	0.000154	998,132.45	0.90546
9	0.000148	997,978.74	0.90560
10	0.00015	997,831.04	0.90574
11	0.000158	997,681.36	0.90587
12	0.000171	997,523.73	0.90601
13	0.000192	997,353.15	0.90617
14	0.000225	997,161.66	0.90634
15	0.000262	996,937.30	0.90655
16	0.000296	996,676.10	0.90679
17	0.000324	996,381.08	0.90705
18	0.000343	996,058.26	0.90735
19	0.000357	995,716.61	0.90766
20	0.000368	995,361.14	0.90798
21	0.000381	994,994.85	0.90832
22	0.000396	994,615.75	0.90866
23	0.000418	994,221.88	0.90902
24	0.000441	993,806.30	0.90940
25	0.000468	993,368.03	0.90980
26	0.0005	992,903.14	0.91023
27	0.000523	992,406.68	0.91069
28	0.000543	991,887.65	0.91116
29	0.000564	991,349.06	0.91166
30	0.000588	990,789.94	0.91217
31	0.000612	990,207.35	0.91271
32	0.000633	989,601.35	0.91327
33	0.000649	988,974.93	0.91385
34	0.000661	988,333.09	0.91444
35	0.000675	987,679.80	0.91504
36	0.000695	987,013.11	0.91566
37	0.000727	986,327.14	0.91630
38	0.000768	985,610.08	0.91697
39	0.000819	984,853.13	0.91767
40	0.000879	984,046.54	0.91842
41	0.000944	983,181.56	0.91923
42	0.001014	982,253.44	0.92010
43	0.001083	981,257.43	0.92103
44	0.001151	980,194.73	0.92203
45	0.001224	979,066.52	0.92309
46	0.001312	977,868.15	0.92423
47	0.001422	976,585.18	0.92544
48	0.001554	975,196.48	0.92676
49	0.001699	973,681.02	0.92820
50	0.001869	972,026.74	0.92978
51	0.002065	970,210.02	0.93152
52	0.002302	968,206.54	0.93345
53	0.002571	965,977.73	0.93560
54	0.002854	963,494.20	0.93801
55	0.003197	960,744.39	0.94070
56	0.003614	957,672.89	0.94372

57	0.004124	954,211.86	0.94714
58	0.004712	950,276.69	0.95106
59	0.005345	945,798.98	0.95556
60	0.006062	940,743.69	0.96070
61	0.006912	935,040.90	0.96656
62	0.007846	928,577.90	0.97329
63	0.008958	921,292.27	0.98098
64	0.010151	913,039.34	0.98985
65	0.011441	903,771.08	1.00000
66	0.01287	893,431.03	
67	0.014291	881,932.57	
68	0.015614	869,328.88	
69	0.017	855,755.17	
70	0.018396	841,207.34	
71	0.020025	825,732.49	
72	0.022026	809,197.19	
73	0.024187	791,373.82	
74	0.026581	772,232.86	
75	0.02931	751,706.14	
76	0.032392	729,673.63	
77	0.036288	706,038.04	
78	0.040636	680,417.33	
79	0.045463	652,767.89	
80	0.050795	623,091.11	
81	0.056655	591,441.19	
82	0.063064	557,933.09	
83	0.069481	522,747.60	
84	0.076539	486,426.57	
85	0.084129	449,195.97	
86	0.092686	411,405.56	
87	0.103014	373,274.03	
88	0.114434	334,821.58	
89	0.126925	296,506.60	
90	0.14065	258,872.50	
91	0.154664	222,462.09	
92	0.17019	188,055.21	
93	0.186631	156,050.09	
94	0.203518	126,926.31	
95	0.222123	101,094.52	
96	0.240233	78,639.10	
97	0.25938	59,747.39	
98	0.278936	44,250.12	
99	0.297614	31,907.17	
100	0.31663	22,411.15	
101	0.33875	15,315.10	
102	0.35883	10,127.11	
103	0.38073	6,493.20	
104	0.40442	4,021.04	
105	0.42788	2,394.85	
106	0.44908	1,370.14	
107	0.46601	754.84	
108	0.47858	403.08	
109	0.48814	210.17	
110	0.49872	107.58	
111	0.5	53.93	
112	0.5	26.96	
113	0.5	13.48	
114	0.5	6.74	
115	0.5	3.37	
116	0.5	1.69	
117	0.5	0.84	
118	0.5	0.42	
119	0.5	0.21	
120	0.999999	0.11	

Immediate Annuity Factors using 83GAMU							
	1996	1997	1998	1999	2000	2001	2002
Age	6.06%	6.55%	6.00%	6.00%	6.35%	6.00%	6.00%
20	16.34726	15.28425	16.48699	16.48699	15.70198	16.48699	16.48699
21	16.30982	15.25434	16.44850	16.44850	15.66923	16.44850	16.44850
22	16.27034	15.22267	16.40792	16.40792	15.63461	16.40792	16.40792
23	16.22867	15.18913	16.36511	16.36511	15.59799	16.36511	16.36511
24	16.18471	15.15361	16.31997	16.31997	15.55927	16.31997	16.31997
25	16.13834	15.11600	16.27237	16.27237	15.51833	16.27237	16.27237
26	16.08944	15.07620	16.22220	16.22220	15.47507	16.22220	16.22220
27	16.03787	15.03407	16.16932	16.16932	15.42935	16.16932	16.16932
28	15.98348	14.98947	16.11357	16.11357	15.38102	16.11357	16.11357
29	15.92617	14.94230	16.05486	16.05486	15.32998	16.05486	16.05486
30	15.86575	14.89239	15.99298	15.99298	15.27606	15.99298	15.99298
31	15.80211	14.83963	15.92785	15.92785	15.21914	15.92785	15.92785
32	15.73508	14.78384	15.85926	15.85926	15.15904	15.85926	15.85926
33	15.66447	14.72487	15.78705	15.78705	15.09561	15.78705	15.78705
34	15.59012	14.66255	15.71106	15.71106	15.02868	15.71106	15.71106
35	15.51187	14.59671	15.63110	15.63110	14.95807	15.63110	15.63110
36	15.42967	14.52733	15.54716	15.54716	14.88376	15.54716	15.54716
37	15.34303	14.45390	15.45871	15.45871	14.80525	15.45871	15.45871
38	15.25179	14.37629	15.36561	15.36561	14.72238	15.36561	15.36561
39	15.15581	14.29435	15.26773	15.26773	14.63502	15.26773	15.26773
40	15.05497	14.20796	15.16493	15.16493	14.54305	15.16493	15.16493
41	14.94914	14.11698	15.05710	15.05710	14.44633	15.05710	15.05710
42	14.83819	14.02126	14.94409	14.94409	14.34471	14.94409	14.94409
43	14.72203	13.92072	14.82582	14.82582	14.23812	14.82582	14.82582
44	14.60060	13.81529	14.70225	14.70225	14.12648	14.70225	14.70225
45	14.47387	13.70491	14.57332	14.57332	14.00975	14.57332	14.57332
46	14.34180	13.58954	14.43901	14.43901	13.88789	14.43901	14.43901
47	14.20439	13.46916	14.29932	14.29932	13.76088	14.29932	14.29932
48	14.06159	13.34371	14.15421	14.15421	13.62867	14.15421	14.15421
49	13.91326	13.21303	14.00353	14.00353	13.49111	14.00353	14.00353
50	13.75925	13.07697	13.84714	13.84714	13.34804	13.84714	13.84714
51	13.59929	12.93524	13.68476	13.68476	13.19918	13.68476	13.68476
52	13.43308	12.78753	13.51609	13.51609	13.04424	13.51609	13.51609
53	13.26028	12.63352	13.34081	13.34081	12.88287	13.34081	13.34081
54	13.08057	12.47285	13.15858	13.15858	12.71474	13.15858	13.15858
55	12.89368	12.30525	12.96915	12.96915	12.53957	12.96915	12.96915
56	12.69926	12.13035	12.77216	12.77216	12.35700	12.77216	12.77216
57	12.49704	11.94785	12.56736	12.56736	12.16675	12.56736	12.56736
58	12.28681	11.75751	12.35451	12.35451	11.96858	12.35451	12.35451
59	12.06847	11.55922	12.13356	12.13356	11.76240	12.13356	12.13356
60	11.84207	11.35296	11.90452	11.90452	11.54819	11.90452	11.90452
61	11.60771	11.13880	11.66754	11.66754	11.32606	11.66754	11.66754
62	11.36561	10.91689	11.42281	11.42281	11.09617	11.42281	11.42281
63	11.11613	10.68755	11.17071	11.17071	10.85887	11.17071	11.17071
64	10.85971	10.45117	10.91169	10.91169	10.61455	10.91169	10.91169
65	10.59694	10.20826	10.64635	10.64635	10.36378	10.64635	10.64635

Immediate Annuity Factors using 94GAR					
	2003	2004	2005	2006	2007
Age	6.00%	6.00%	6.00%	6.00%	6.00%
20	16.51552	16.51552	16.51552	16.51552	16.51552
21	16.48018	16.48018	16.48018	16.48018	16.48018
22	16.44293	16.44293	16.44293	16.44293	16.44293
23	16.40368	16.40368	16.40368	16.40368	16.40368
24	16.36244	16.36244	16.36244	16.36244	16.36244
25	16.31908	16.31908	16.31908	16.31908	16.31908
26	16.27356	16.27356	16.27356	16.27356	16.27356
27	16.22581	16.22581	16.22581	16.22581	16.22581
28	16.17556	16.17556	16.17556	16.17556	16.17556
29	16.12260	16.12260	16.12260	16.12260	16.12260
30	16.06677	16.06677	16.06677	16.06677	16.06677
31	16.00796	16.00796	16.00796	16.00796	16.00796
32	15.94598	15.94598	15.94598	15.94598	15.94598
33	15.88058	15.88058	15.88058	15.88058	15.88058
34	15.81147	15.81147	15.81147	15.81147	15.81147
35	15.73837	15.73837	15.73837	15.73837	15.73837
36	15.66105	15.66105	15.66105	15.66105	15.66105
37	15.57936	15.57936	15.57936	15.57936	15.57936
38	15.49322	15.49322	15.49322	15.49322	15.49322
39	15.40249	15.40249	15.40249	15.40249	15.40249
40	15.30705	15.30705	15.30705	15.30705	15.30705
41	15.20675	15.20675	15.20675	15.20675	15.20675
42	15.10134	15.10134	15.10134	15.10134	15.10134
43	14.99059	14.99059	14.99059	14.99059	14.99059
44	14.87413	14.87413	14.87413	14.87413	14.87413
45	14.75158	14.75158	14.75158	14.75158	14.75158
46	14.62263	14.62263	14.62263	14.62263	14.62263
47	14.48710	14.48710	14.48710	14.48710	14.48710
48	14.34488	14.34488	14.34488	14.34488	14.34488
49	14.19584	14.19584	14.19584	14.19584	14.19584
50	14.03973	14.03973	14.03973	14.03973	14.03973
51	13.87640	13.87640	13.87640	13.87640	13.87640
52	13.70573	13.70573	13.70573	13.70573	13.70573
53	13.52777	13.52777	13.52777	13.52777	13.52777
54	13.34242	13.34242	13.34242	13.34242	13.34242
55	13.14930	13.14930	13.14930	13.14930	13.14930
56	12.94862	12.94862	12.94862	12.94862	12.94862
57	12.74074	12.74074	12.74074	12.74074	12.74074
58	12.52624	12.52624	12.52624	12.52624	12.52624
59	12.30545	12.30545	12.30545	12.30545	12.30545
60	12.07829	12.07829	12.07829	12.07829	12.07829
61	11.84507	11.84507	11.84507	11.84507	11.84507
62	11.60667	11.60667	11.60667	11.60667	11.60667
63	11.36332	11.36332	11.36332	11.36332	11.36332
64	11.11630	11.11630	11.11630	11.11630	11.11630
65	10.86573	10.86573	10.86573	10.86573	10.86573

Present Value Factor for 417(e)								
	1996	1997	1998	1999	2000	2001	2002	
Age	6.06%	6.55%	5.99%	5.06%	6.35%	5.49%	5.48%	7.87%
20	0.67198	0.52607	0.69601	1.11468	0.58121	0.89570	0.90025	0.27478
21	0.71291	0.56069	0.73791	1.17141	0.61829	0.94515	0.94986	0.29649
22	0.75633	0.59759	0.78235	1.23105	0.65775	0.99733	1.00221	0.31991
23	0.80241	0.63693	0.82947	1.29374	0.69973	1.05241	1.05746	0.34520
24	0.85132	0.67887	0.87944	1.35965	0.74440	1.11055	1.11577	0.37249
25	0.90322	0.72358	0.93243	1.42893	0.79194	1.17192	1.17731	0.40194
26	0.95829	0.77126	0.98864	1.50178	0.84253	1.23670	1.24227	0.43373
27	1.01675	0.82208	1.04826	1.57836	0.89637	1.30509	1.31085	0.46804
28	1.07880	0.87628	1.11149	1.65889	0.95367	1.37728	1.38323	0.50507
29	1.14465	0.93407	1.17857	1.74356	1.01466	1.45351	1.45965	0.54505
30	1.21456	0.99570	1.24972	1.83261	1.07957	1.53399	1.54032	0.58821
31	1.28878	1.06142	1.32521	1.92625	1.14867	1.61898	1.62551	0.63480
32	1.36757	1.13151	1.40530	2.02474	1.22223	1.70872	1.71545	0.68511
33	1.45122	1.20627	1.49028	2.12834	1.30054	1.80350	1.81043	0.73943
34	1.54005	1.28602	1.58045	2.23732	1.38392	1.90361	1.91074	0.79808
35	1.63438	1.37110	1.67615	2.35197	1.47270	2.00935	2.01669	0.86141
36	1.73458	1.46188	1.77774	2.47263	1.56726	2.12108	2.12862	0.92983
37	1.84100	1.55874	1.88555	2.59958	1.66796	2.23910	2.24686	1.00371
38	1.95403	1.66208	2.00000	2.73317	1.77521	2.36381	2.37176	1.08352
39	2.07411	1.77238	2.12151	2.87378	1.88946	2.49559	2.50376	1.16974
40	2.20173	1.89012	2.25055	3.02184	2.01120	2.63490	2.64327	1.26290
41	2.33738	2.01584	2.38764	3.17777	2.14094	2.78220	2.79078	1.36358
42	2.48161	2.15012	2.53330	3.34205	2.27927	2.93801	2.94678	1.47243
43	2.63503	2.29359	2.68814	3.51520	2.42680	3.10288	3.11185	1.59014
44	2.79829	2.44695	2.85280	3.69779	2.58420	3.27742	3.28658	1.71748
45	2.97210	2.61095	3.02800	3.89045	2.75222	3.46228	3.47164	1.85530
46	3.15725	2.78642	3.21451	4.09385	2.93167	3.65820	3.66774	2.00451
47	3.35460	2.97426	3.41318	4.30872	3.12344	3.86598	3.87568	2.16615
48	3.56507	3.17547	3.62493	4.53588	3.32848	4.08645	4.09632	2.34134
49	3.78965	3.39110	3.85074	4.77615	3.54783	4.32052	4.33055	2.53130
50	4.02941	3.62231	4.09167	5.03045	3.78261	4.56918	4.57936	2.73739
51	4.28550	3.87032	4.34884	5.29971	4.03401	4.83346	4.84376	2.96104
52	4.55914	4.13648	4.62348	5.58496	4.30333	5.11446	5.12487	3.20388
53	4.85169	4.42224	4.91690	5.88729	4.59198	5.41339	5.42390	3.46765
54	5.16460	4.72920	5.23056	6.20791	4.90151	5.73156	5.74214	3.75429
55	5.49951	5.05914	5.56607	6.54814	5.23363	6.07043	6.08106	4.06597
56	5.85818	5.41399	5.92517	6.90943	5.59020	6.43158	6.44223	4.40506
57	6.24259	5.79591	6.30982	7.29341	5.97332	6.81679	6.82743	4.77423
58	6.65498	6.20733	6.72220	7.70190	6.38532	7.22805	7.23865	5.17647
59	7.09788	6.65103	7.16484	8.13703	6.82891	7.66766	7.67818	5.61519
60	7.57424	7.13019	7.64065	8.60125	7.30714	8.13828	8.14867	6.09430
61	8.08742	7.64846	8.15295	9.09743	7.82356	8.64298	8.65319	6.61827
62	8.64132	8.21005	8.70558	9.62885	8.38224	9.18530	9.19528	7.19223
63	9.24050	8.81988	9.30307	10.19942	8.98796	9.76941	9.77909	7.82218
64	9.89027	9.48370	9.95068	10.81370	9.64628	10.40018	10.40951	8.51510
65	10.59694	10.20826	10.65462	11.47710	10.36378	11.08339	11.09228	9.27921

Present Value Factor for 417(e)					
	2003	2004	2005	2006	2007
Age	4.92%	5.07%	4.86%	4.65%	4.68%
20	1.24183	1.14983	1.28074	1.42714	1.40521
21	1.30341	1.20857	1.34348	1.49405	1.47151
22	1.36806	1.27033	1.40931	1.56412	1.54097
23	1.43594	1.33527	1.47839	1.63750	1.61373
24	1.50722	1.40355	1.55088	1.71436	1.68995
25	1.58207	1.47536	1.62697	1.79487	1.76982
26	1.66069	1.55089	1.70684	1.87922	1.85352
27	1.74326	1.63034	1.79069	1.96758	1.94123
28	1.82999	1.71389	1.87870	2.06015	2.03315
29	1.92107	1.80176	1.97108	2.15712	2.12946
30	2.01672	1.89418	2.06804	2.25870	2.23037
31	2.11719	1.99139	2.16982	2.36512	2.33613
32	2.22271	2.09363	2.27667	2.47662	2.44696
33	2.33355	2.20117	2.38883	2.59342	2.56310
34	2.44995	2.31427	2.50655	2.71578	2.68479
35	2.57219	2.43321	2.63011	2.84394	2.81230
36	2.70056	2.55830	2.75979	2.97819	2.94590
37	2.83540	2.68988	2.89593	3.11885	3.08591
38	2.97707	2.82831	3.03888	3.26625	3.23269
39	3.12594	2.97399	3.18902	3.42075	3.38658
40	3.28242	3.12734	3.34675	3.58275	3.54797
41	3.44695	3.28878	3.51249	3.75265	3.71729
42	3.61996	3.45879	3.68668	3.93086	3.89493
43	3.80191	3.63784	3.86977	4.11782	4.08135
44	3.99329	3.82642	4.06224	4.31397	4.27699
45	4.19459	4.02505	4.26458	4.51977	4.48231
46	4.40636	4.23431	4.47732	4.73574	4.69784
47	4.62922	4.45483	4.70108	4.96246	4.92416
48	4.86390	4.68735	4.93657	5.20061	5.16195
49	5.11114	4.93267	5.18455	5.45091	5.41194
50	5.37174	5.19158	5.44577	5.71409	5.67486
51	5.64658	5.46500	5.72113	5.99099	5.95156
52	5.93665	5.75396	6.01159	6.28254	6.24299
53	6.24311	6.05964	6.31829	6.58985	6.55024
54	6.56715	6.38327	6.64244	6.91405	6.87446
55	6.90998	6.72610	6.98520	7.25627	7.21679
56	7.27320	7.08978	7.34817	7.61804	7.57876
57	7.65872	7.47625	7.73324	8.00119	7.96222
58	8.06880	7.88782	8.14266	8.40792	8.36937
59	8.50587	8.32697	8.57881	8.84055	8.80253
60	8.97231	8.79617	9.04408	9.30135	9.26401
61	9.47117	9.29850	9.54147	9.79323	9.75671
62	10.00631	9.83793	10.07482	10.31995	10.28441
63	10.58165	10.41846	10.64800	10.88523	10.85086
64	11.20262	11.04562	11.26642	11.49436	11.46135
65	11.87432	11.72465	11.93512	12.15220	12.12078

Prior Plan Adjustments at 7.5% UP-84						
Age	UP-84	Lx	65Px	Years to 65	PVFX	Act Red
1	0	1,000,000.00	0.785388106	64	0.06489	0.00473
2	0	1,000,000.00	0.785388106	63	0.06976	0.00509
3	0	1,000,000.00	0.785388106	62	0.07499	0.00548
4	0	1,000,000.00	0.785388106	61	0.08062	0.00590
5	0	1,000,000.00	0.785388106	60	0.08666	0.00634
6	0	1,000,000.00	0.785388106	59	0.09316	0.00683
7	0	1,000,000.00	0.785388106	58	0.10015	0.00735
8	0	1,000,000.00	0.785388106	57	0.10766	0.00791
9	0	1,000,000.00	0.785388106	56	0.11574	0.00852
10	0	1,000,000.00	0.785388106	55	0.12442	0.00917
11	0	1,000,000.00	0.785388106	54	0.13375	0.00987
12	0	1,000,000.00	0.785388106	53	0.14378	0.01063
13	0	1,000,000.00	0.785388106	52	0.15456	0.01145
14	0	1,000,000.00	0.785388106	51	0.16615	0.01234
15	0	1,000,000.00	0.785388106	50	0.17862	0.01330
16	0.001437	1,000,000.00	0.785388106	49	0.19201	0.01433
17	0.001414	998,563.00	0.786518333	48	0.20671	0.01544
18	0.001385	997,151.03	0.787632045	47	0.22253	0.01665
19	0.001351	995,769.98	0.788724428	46	0.23955	0.01795
20	0.001311	994,424.69	0.789791436	45	0.25786	0.01935
21	0.001267	993,121.00	0.790828212	44	0.27757	0.02086
22	0.001219	991,862.72	0.791831463	43	0.29876	0.02250
23	0.001167	990,653.64	0.792797883	42	0.32156	0.02427
24	0.001149	989,497.54	0.793724159	41	0.34608	0.02618
25	0.001129	988,360.61	0.794637197	40	0.37247	0.02825
26	0.001107	987,244.75	0.795535357	39	0.40085	0.03048
27	0.001083	986,151.87	0.79641699	38	0.43140	0.03290
28	0.001058	985,083.87	0.797280445	37	0.46425	0.03552
29	0.001083	984,041.65	0.798124861	36	0.49960	0.03836
30	0.001111	982,975.93	0.798990168	35	0.53765	0.04144
31	0.001141	981,883.85	0.799878833	34	0.57862	0.04478
32	0.001173	980,763.52	0.800792537	33	0.62273	0.04841
33	0.001208	979,613.08	0.80173297	32	0.67022	0.05235
34	0.001297	978,429.71	0.802702635	31	0.72136	0.05662
35	0.001398	977,160.69	0.803745092	30	0.77647	0.06128
36	0.001513	975,794.62	0.804870301	29	0.83587	0.06634
37	0.001643	974,318.24	0.806089915	28	0.89992	0.07186
38	0.001792	972,717.43	0.8074165	27	0.96901	0.07788
39	0.001948	970,974.32	0.808865988	26	1.04355	0.08444
40	0.002125	969,082.87	0.810444734	25	1.12401	0.09161
41	0.002327	967,023.57	0.812170597	24	1.21088	0.09945
42	0.002556	964,773.30	0.814064926	23	1.30473	0.10803
43	0.002818	962,307.34	0.816151008	22	1.40618	0.11743
44	0.003095	959,595.56	0.818457421	21	1.51592	0.12774
45	0.00341	956,625.61	0.820998411	20	1.63467	0.13907
46	0.003769	953,363.52	0.823807595	19	1.76329	0.15153
47	0.00418	949,770.29	0.826924273	18	1.90270	0.16525
48	0.004635	945,800.25	0.830395325	17	2.05399	0.18039
49	0.005103	941,416.47	0.83426213	16	2.21832	0.19712
50	0.005616	936,612.42	0.838541206	15	2.39693	0.21562
51	0.006196	931,352.40	0.84327705	14	2.59125	0.23613
52	0.006853	925,581.74	0.84853457	13	2.80296	0.25891
53	0.007543	919,238.73	0.854389703	12	3.03398	0.28425
54	0.008278	912,304.91	0.860883346	11	3.28631	0.31250
55	0.009033	904,752.85	0.868069223	10	3.56228	0.34406
56	0.009875	896,580.22	0.875981968	9	3.86435	0.37938
57	0.010814	887,726.49	0.884718564	8	4.19561	0.41903
58	0.011863	878,126.62	0.894390502	7	4.55959	0.46365
59	0.012952	867,709.40	0.905128036	6	4.96041	0.51398
60	0.014162	856,470.83	0.917005086	5	5.40241	0.57091
61	0.015509	844,341.49	0.930178271	4	5.89102	0.63552
62	0.01701	831,246.60	0.944831665	3	6.43261	0.70906

63	0.018685	817,107.09	0.96118136	2	7.03471	0.79305
64	0.020517	801,839.45	0.979483	1	7.70631	0.88930
65	0.022562	785,388.11	1	0	8.45781	1.00000
66	0.024847	767,668.18				
67	0.027232	748,593.93				
68	0.029634	728,208.22				
69	0.032073	706,628.50				
70	0.034743	683,964.80				
71	0.037667	660,201.81				
72	0.040871	635,333.99				
73	0.044504	609,367.25				
74	0.048504	582,247.97				
75	0.052913	554,006.62				
76	0.057775	524,692.47				
77	0.063142	494,378.36				
78	0.068628	463,162.32				
79	0.074648	431,376.42				
80	0.081256	399,175.03				
81	0.088518	366,739.66				
82	0.096218	334,276.60				
83	0.10431	302,113.18				
84	0.112816	270,599.75				
85	0.122079	240,071.77				
86	0.132174	210,764.05				
87	0.143179	182,906.52				
88	0.155147	156,718.15				
89	0.168208	132,403.80				
90	0.182461	110,132.42				
91	0.19803	90,037.55				
92	0.215035	72,207.41				
93	0.232983	56,680.29				
94	0.252545	43,474.75				
95	0.273878	32,495.42				
96	0.297152	23,595.64				
97	0.322553	16,584.15				
98	0.349505	11,234.88				
99	0.378865	7,308.23				
100	0.410875	4,539.40				
101	0.445768	2,674.27				
102	0.48383	1,482.17				
103	0.524301	765.05				
104	0.568365	363.93				
105	0.616382	157.09				
106	0.668696	60.26				
107	0.725745	19.96				
108	0.786495	5.48				
109	0.852659	1.17				
110	0.924666	0.17				
111	0.999999	0.01				
112	0.999999	0.00				
113	0.999999	0.00				
114	0.999999	0.00				
115	0.999999	0.00				
116	0.999999	0.00				
117	0.999999	0.00				
118	0.999999	0.00				
119	0.999999	0.00				
120	0.999999	0.00				